

CURRENT INDUSTRIAL REPORTS

**Manufacturers' Shipments,
Inventories, and Orders**

June 1976



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All figures in text below are in seasonally adjusted current dollars

Manufactures reported significant increases in their inventories and backlog of unfilled orders as of the end of June, while June shipments and new orders received were virtually unchanged from their May levels, the Bureau of the Census, Department of Commerce, reported today. June shipments were \$94,028 million compared to May shipments of \$94,087 million, while new orders for these months were \$95,501 million in June and \$95,494 million in May. The 1.2 percent or \$1,472 million increase in backlog of unfilled orders continues the upward trend which began in March.

The rise in total inventories of 1.2 percent or \$1,738 million to \$150,777 million is the largest increase since December 1974. The June increase follows a limited rise in May (0.6 percent or \$918 million) and results in a \$2,627 million or 1.8 percent change for the second quarter. The changes in inventories reflect the trend of nearly all industries, both durable and nondurable. Some of the largest inventory increases include those in motor vehicles and parts (\$221 million or 3.5 percent), blast furnaces and steel mills (\$220 million or 2.7 percent), petroleum and coal products (\$200 million or 4.6 percent) and chemicals (\$159 million or 1.4 percent). All components of inventories increased with the leading increase in finished goods (1.5 percent or \$701 million), followed by materials and supplies (1.1 percent or \$568 million) and work-in-process (1.0 percent or \$469 million).

Changes in shipments and new orders varied considerably among the industry groups. Durable goods shipments rose \$412 million or 0.9 percent to \$48,733 million and new orders rose \$623 million or 1.3 percent to \$50,304 million. Nondurable goods shipments declined by \$471 million or 1.0 percent to \$45,295 million and new orders declined by \$616 million or 1.3 percent to \$45,197 million. The major decline in nondurable goods was in the foods industries where

shipments declined by \$303 million or 2.1 percent to \$14,229 million.

The pattern of change in durable goods is unchanged from the advance report issued last week. The blast furnace and steel mill industry showed a 4.1 percent or \$162 million increase in shipments and a 13.8 percent or \$689 million decline in new orders. This decline in new orders followed a \$1,351 million or 37.2 percent increase in new orders in May. Motor vehicle and parts producers reported a \$765 million or 9.6 percent increase in shipments to \$8,774 million in June from \$8,009 million in May. Defense capital goods producers (which includes the defense related portions of the communication equipment, aircraft and aircraft parts, shipbuilding and ordnance industries) reported a \$199 million or 10.3 percent decline in shipments accompanied by a \$680 million or 32.9 percent increase in new orders. Nondefense-capital goods producers reported an increase of \$141 million or 1.2 percent in shipments to \$11,807 million and a \$172 million or 1.5 percent increase in new orders to \$11,836 million.

SCHEDULED RELEASE DATES

The figures on the durable goods industries in this report supersede those issued earlier in the advance report on durable goods. The present report is based on more complete reporting, but the estimates are also considered preliminary. Final figures will appear as historical data in the report to be published for next month. The advance report on durable goods for July is scheduled for release on August 20, 1976 and the full report is scheduled for release on August 31, 1976.

This report contains data on an unadjusted and seasonally adjusted basis. However, the data are not adjusted for price changes. For an explanation of terms used in this report see appendix following table 5.



U.S. Department of Commerce BUREAU OF THE CENSUS

Inquiries concerning these figures should be addressed to the U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233. For sale by the Subscriber Services Section (Publications), Bureau of the Census, Washington, D.C. 20233 or any Department of Commerce District Office.
Price: 30 cents per copy, \$3.60 per year.

Table 1.--VALUE OF MANUFACTURERS' SHIPMENTS, INVENTORIES, AND ORDERS, BY INDUSTRY GROUP

Millions of dollars¹

Industry group	Shipments						Total inventories					
	Seasonally adjusted			Without seasonal adjustment ¹			Seasonally adjusted			Without seasonal adjustment ¹		
	June 1976 ^D	May 1976 ^F	Apr. 1976	June 1976 ^D	May 1976 ^F	June 1975	June 1976 ^D	May 1976 ^F	Apr. 1976	June 1976 ^D	May 1976 ^F	June 1975
All manufacturing industries:												
Total.....	94,028	94,087	93,848	99,294	94,864	85,580	150,777	149,039	148,121	150,816	150,159	148,160
Total, excluding transportation.....	81,928	82,700	82,234	86,312	82,903	75,449	128,817	127,391	126,623	129,321	128,592	127,116
Durable goods industries, total.....	48,733	48,321	47,741	52,316	49,363	43,785	97,476	96,579	96,133	97,525	97,401	98,910
Stone, clay, and glass products.....	2,380	2,352	2,374	2,606	2,448	2,321	3,655	3,610	3,568	3,716	3,727	3,753
Primary metals, total.....	7,743	7,595	7,096	8,240	7,913	6,350	14,662	14,442	14,227	14,493	14,389	14,144
Blast furnaces, steel mills.....	4,089	3,927	3,672	4,286	4,057	3,195	8,406	8,186	7,979	8,221	8,112	7,599
Nonferrous metals.....	2,472	2,485	2,283	2,675	2,647	2,014	4,682	4,704	4,718	4,658	4,690	4,764
All other primary metals.....	1,182	1,183	1,141	1,279	1,209	1,141	1,574	1,552	1,530	1,614	1,587	1,781
Fabricated metal products:												
Total.....	6,037	6,228	5,994	6,462	6,256	5,248	10,556	10,638	10,692	10,785	10,810	11,654
Metal cans, barrels, and drums.....	597	634	600	681	636	647	907	874	905	970	916	1,062
Machinery, except electrical, total.....	8,024	8,129	8,077	8,830	8,331	8,122	20,915	20,797	20,851	20,925	20,975	22,128
Engines and turbines.....	589	634	651	702	647	619	1,895	1,803	1,807	1,840	1,816	1,918
Farm machinery and equipment.....	755	863	898	828	888	866	1,814	1,810	1,814	1,832	1,828	2,065
Construction, mining, and material handling equipment.....	1,665	1,713	1,630	1,812	1,747	1,755	4,875	4,893	4,946	4,890	4,937	4,953
Metalworking machinery.....	542	548	518	609	560	588	1,569	1,583	1,605	1,561	1,593	1,848
General industrial machinery.....	902	912	883	999	926	859	1,966	1,949	1,953	1,988	1,988	2,058
Electrical machinery, total.....	6,009	6,208	6,194	6,374	5,987	5,630	13,495	13,330	13,258	13,755	13,653	13,839
Electrical transmission and distribution equipment and industrial apparatus.....	1,220	1,241	1,262	1,320	1,290	1,147	2,903	2,887	2,860	2,921	2,932	3,015
Household appliances.....	862	863	1,478	940	879	836	1,290	1,233	1,185	1,294	1,276	1,152
Radio and TV.....	467	690	592	540	492	457	1,039	969	987	1,102	1,062	1,077
Communication equipment.....	1,264	1,318	1,308	1,349	1,302	1,291	4,147	4,099	4,092	4,188	4,164	4,222
Transportation equipment, total.....	12,100	11,387	11,614	12,983	11,961	10,131	21,960	21,648	21,498	21,495	21,567	21,044
Motor vehicles and parts.....	8,774	8,009	8,117	9,431	8,409	6,659	6,609	6,388	6,248	6,226	6,311	5,985
Aircraft, missiles, and parts.....	2,169	2,191	2,287	2,273	2,252	2,265	11,795	11,855	11,956	11,765	11,903	11,585
Shipbuilding and railroad equipment.....	607	618	590	617	623	633	2,763	2,682	2,619	2,730	2,623	2,779
Instruments and related products, total.....	1,560	1,571	1,566	1,658	1,566	1,493	3,775	3,767	3,732	3,867	3,866	4,065
Scientific and engineering.....	790	841	824	849	846	798	1,978	1,943	1,952	2,010	1,981	2,021
All other instruments and related products.....	770	730	742	809	720	695	1,797	1,824	1,780	1,857	1,885	2,044
All other durable goods industries.....	4,880	4,851	4,826	5,164	4,901	4,490	8,458	8,347	8,307	8,489	8,414	8,283
Nondurable goods industries, total.....	45,295	45,766	46,107	46,978	45,501	41,795	55,301	52,460	51,988	53,291	52,758	49,250
Food and kindred products, total.....	14,229	14,532	14,763	14,627	14,337	14,059	11,980	11,839	11,845	11,620	11,603	10,385
Meat products.....	3,121	3,169	3,222	3,143	3,197	3,197	1,356	1,367	1,334	1,371	1,406	1,226
Fats and oils.....	1,287	1,254	1,281	1,313	1,255	1,178	1,084	1,026	982	1,035	1,010	655
Tobacco products.....	609	595	644	657	602	627	3,416	3,396	3,331	3,266	3,349	2,959
Textile mill products.....	3,293	3,362	3,238	3,496	3,288	2,924	4,777	4,728	4,678	4,932	4,910	4,336
Paper and allied products, total.....	3,939	3,995	3,882	4,116	3,966	3,419	4,868	4,799	4,747	4,933	4,862	4,658
Pulp, paper, etc.....	1,852	1,883	1,869	1,916	1,869	1,512	1,873	1,829	1,782	1,889	1,841	1,793
Paperboard containers.....	859	868	838	903	881	784	1,302	1,281	1,271	1,314	1,294	1,218
All other paper containers.....	1,228	1,244	1,175	1,297	1,216	1,123	1,693	1,689	1,694	1,730	1,727	1,647
Chemicals and allied products, total.....	7,846	7,867	8,183	8,325	8,479	7,374	11,373	11,214	11,088	11,366	11,248	10,922
Industrial chemicals, except pigment.....	2,647	2,686	2,724	2,798	2,796	2,315	3,220	3,153	3,069	3,169	3,115	2,972
Drugs, soap, and toiletries.....	2,232	2,191	2,266	2,239	2,022	2,067	3,640	3,635	3,647	3,749	3,704	3,803
Petroleum and coal products.....	6,186	6,037	6,084	6,307	5,946	5,376	4,561	4,361	4,290	4,495	4,313	4,048
Rubber and plastics products, total.....	2,161	2,215	2,214	2,309	2,284	2,116	3,003	3,022	3,032	3,000	3,035	3,048
All other nondurable goods industries.....	7,032	7,163	7,049	7,141	6,699	5,900	9,323	9,101	8,977	9,679	9,438	8,894

See footnotes at end of table.

Table 1.--VALUE OF MANUFACTURERS' SHIPMENTS, INVENTORIES, AND ORDERS, BY INDUSTRY GROUP--Continued

Millions of dollars

Industry group	New orders						Unfilled orders					
	Seasonally adjusted			Without seasonal adjustment ¹			Seasonally adjusted			Without seasonal adjustment ¹		
	June 1976 ^P	May 1976 ^R	Apr. 1976	June 1976 ^P	May 1976 ^R	June 1975	June 1976 ^P	May 1976 ^R	Apr. 1976	June 1976 ^P	May 1976 ^R	June 1975
All manufacturing industries:												
Total.....	95,501	95,494	94,141	100,150	94,568	83,716	122,262	120,790	119,390	121,185	120,335	122,274
Total, excluding transportation.....	83,145	84,042	82,569	87,209	83,168	74,113	90,541	89,324	87,936	90,200	89,309	90,787
Durable goods industries, total.....	50,304	49,681	47,841	53,327	49,007	41,737	116,749	115,181	113,828	115,604	114,596	118,065
Primary metals, total.....	8,055	8,805	7,238	8,430	8,320	5,664	15,734	15,424	14,216	15,614	15,425	14,441
Blast furnaces, steel mills.....	4,296	4,985	3,634	4,441	4,479	2,861	10,682	10,476	9,418	10,629	10,424	9,222
Nonferrous metals.....	2,583	2,651	2,478	2,680	2,642	1,889	3,238	3,127	2,962	3,160	3,155	2,649
Fabricated metal products.....	6,090	6,094	5,788	6,498	6,085	5,031	16,638	16,587	16,722	16,680	16,646	18,373
Machinery, except electrical, total.....	7,970	8,033	8,064	8,660	8,091	7,605	23,889	23,942	24,039	23,907	24,075	26,812
Engines and turbines.....	610	765	592	686	750	556	6,778	6,756	6,626	6,768	6,784	6,837
Construction, mining, and material handling equipment.....	1,652	1,612	1,543	1,819	1,639	1,659	5,058	5,974	5,172	5,144	5,998	6,705
Metalworking machinery.....	544	515	503	614	524	518	1,534	1,532	1,565	1,518	1,513	1,985
General industrial machinery.....	921	917	961	954	887	823	3,396	3,376	3,371	3,375	3,420	3,530
Electrical machinery, total.....	6,626	6,618	6,396	6,900	6,207	5,407	20,104	19,486	19,076	19,644	19,123	18,788
Electrical transmission and distribution equipment and industrial apparatus.....	1,181	1,257	1,280	1,315	1,307	966	5,394	5,433	5,416	5,430	5,436	5,761
Household appliances.....	864	865	890	933	878	839	133	131	128	126	133	130
Radio and TV.....	478	691	531	586	514	475	417	406	405	452	406	376
Communication equipment.....	1,912	1,665	1,498	1,816	1,384	1,365	8,381	7,733	7,387	7,824	7,357	6,909
Transportation equipment, total.....	12,356	11,400	11,572	12,941	11,452	9,603	31,721	31,466	31,454	30,985	31,026	31,487
Aircraft, missiles, and parts.....	2,306	2,251	1,770	2,343	1,969	2,073	19,902	19,766	19,707	19,451	19,382	20,108
Shipbuilding and railroad equipment.....	675	460	1,043	615	365	592	8,097	8,029	8,187	8,018	8,020	8,237
All other durable goods industries.....	9,207	8,731	8,783	9,898	8,852	8,427	8,663	8,276	8,321	8,769	8,301	8,164
Nondurable goods industries, total.....	45,197	45,813	46,300	46,823	45,561	41,989	5,513	5,609	5,562	5,581	5,739	4,209
Industries with unfilled orders.....	10,726	10,954	10,958	11,075	10,805	9,660	5,513	5,609	5,562	5,581	5,739	4,209
Industries without unfilled orders.....	34,471	34,859	35,342	35,748	34,756	32,329	-	-	-	-	-	-

- Represents zero. ^PPreliminary. ^RRevised.
¹Adjusted for trading-day and calendar-month variations.

Table 2.--VALUE OF MANUFACTURERS' SHIPMENTS, INVENTORIES, AND ORDERS, FOR MARKET CATEGORIES AND SUPPLEMENTARY SERIES

(Millions of dollars)

Industry group	Seasonally adjusted			Without seasonal adjustment ¹			Seasonally adjusted			Without seasonal adjustment		
	June 1976 ^P	May 1976 ^r	Apr. 1976	June 1976 ^P	May 1976 ^r	June 1975	June 1976 ^P	May 1976 ^r	Apr. 1976	June 1976 ^P	May 1976 ^r	June 1975
	Shipments						Total inventories					
All manufacturing industries, total..	94,028	94,087	93,848	99,294	94,864	85,580	150,777	149,039	148,121	150,816	150,159	148,160
Durable goods industries, total.....	48,733	48,321	47,741	52,316	49,363	43,785	97,476	96,579	96,133	97,525	97,401	98,910
Nondurable goods industries, total.....	45,295	45,766	46,107	46,978	45,501	41,795	53,301	52,460	51,988	53,291	52,758	49,250
Industry groups arranged by market categories												
Durable goods and apparel.....	8,477	8,879	8,617	8,842	8,198	7,468	13,842	13,509	13,391	14,410	14,147	13,126
Consumer staples.....	17,653	17,923	18,230	18,076	17,566	17,200	19,688	19,532	19,502	19,343	19,345	18,320
Equipment and defense products, except intermediate products.....	11,892	12,198	12,169	12,902	12,423	12,215	37,777	37,555	37,744	37,825	37,856	39,015
Automotive equipment.....	9,959	9,262	9,457	10,796	9,795	7,942	8,127	7,905	7,748	7,715	7,841	7,566
Construction materials, supplies, and intermediate products.....	7,291	7,433	7,335	8,009	7,708	6,551	12,438	12,509	12,425	12,543	12,660	12,927
Other materials and supplies and intermediate products.....	38,756	38,392	38,040	40,669	39,174	34,204	58,905	58,029	57,311	58,982	58,310	57,206
Supplementary series ²												
Household durable goods industries.....	3,695	3,894	3,776	3,901	3,708	3,380	6,680	6,496	6,439	6,858	6,739	6,684
Capital goods industries.....	13,531	13,589	13,563	14,599	13,802	13,549	42,529	42,371	42,426	42,610	42,707	43,611
Nondefense.....	11,807	11,666	11,701	12,784	11,890	11,793	34,054	34,099	34,261	34,163	34,438	36,263
Defense.....	1,724	1,923	1,862	1,815	1,912	1,756	8,475	8,272	8,165	8,447	8,269	7,348
	New orders						Unfilled orders					
All manufacturing industries, total..	95,501	95,494	94,141	100,150	94,568	83,716	122,262	120,790	119,390	121,185	120,335	122,274
Durable goods industries, total.....	50,304	49,681	47,841	53,327	49,007	41,737	116,749	115,181	113,828	115,604	114,596	118,065
Nondurable goods industries, total.....	45,197	45,813	46,300	46,823	45,561	41,979	5,513	5,609	5,562	5,581	5,739	4,209
Industry groups arranged by market categories												
Durable goods and apparel.....	8,472	8,863	8,610	8,867	8,224	7,526	2,397	2,389	2,407	2,392	2,374	2,171
Consumer staples.....	17,666	17,922	18,226	18,071	17,561	17,203						
Equipment and defense products, except intermediate products.....	13,130	12,405	12,454	13,947	11,887	11,741	61,112	59,822	59,506	60,084	59,145	61,008
Automotive equipment.....	10,010	9,373	9,479	10,687	9,827	7,647						
Construction materials, supplies, and intermediate products.....	7,240	7,278	7,074	7,981	7,521	6,423	14,877	14,928	15,063	14,998	15,027	16,720
Other materials and supplies and intermediate products.....	38,983	39,633	38,298	40,597	39,548	33,176	43,876	43,451	42,414	43,711	43,789	42,375
Supplementary series ²												
Household durable goods industries.....	3,711	3,889	3,759	3,950	3,725	3,420	1,707	1,692	1,698	1,699	1,651	1,553
Capital goods industries.....	14,582	13,730	13,674	15,334	13,082	12,738	68,269	67,218	67,080	67,311	66,576	69,754
Nondefense.....	11,836	11,664	11,530	12,722	11,584	10,926	61,249	61,221	61,225	61,226	61,289	65,517
Defense.....	2,746	2,066	2,144	2,612	1,498	1,812	7,020	25,997	25,855	26,085	25,287	24,237

During 1968 manufacturers in ordnance, communications, aircraft and aircraft parts, and shipbuilding industries began to provide aggregate figures on shipments, orders, and total inventories of work performed for the Department of Defense. The results of these reports are included in the defense series. ^PPreliminary. ^rRevised. ¹Shipments and new orders adjusted for trading-day and calendar-month variations; unfilled orders and inventories as of end of month. ²The supplementary series are regroupings of the separate industry categories as follows:

Household durable goods industries = Household furniture; kitchen articles and pottery; cutlery, handtools, and hardware; household appliances; ophthalmic goods, watches, and clocks; and miscellaneous personal goods.

Capital goods industries = The capital goods industries series is comparable to the previous Producers' Capital Goods and the Defense Products and Services categories.

Nondefense products = Machinery, except electrical (excluding farm machinery and equipment and machine shops), electrical machinery (excluding household appliances and electronic components), and the nondefense portions of shipbuilding and repairing and railroad equipment, communication equipment, aircraft and aircraft parts, and ordnance.

Defense products = Based on separate reports on defense work filed by large defense contractors in the following industries: ordnance, communications, aircraft and aircraft parts, and shipbuilding. The data are comparable to those published annually in the MA-175, Shipments of Defense-Oriented Industries, for the specified industries.

Table 3.--MANUFACTURERS' SHIPMENTS, INVENTORIES, AND ORDERS MONTH-TO-MONTH AND LONG-RUN PERCENT CHANGES

(Based on seasonally adjusted data)

Item and industry group	Month-to-month			Average monthly rates of change				Average, 1970-1975	
	May-June 1976	Apr.-May 1976	Mar.-Apr. 1976	3 months			12 months June 1975-June 1976	Average rise	Average decline
				Mar.-June 1976	Dec. 1975-Mar. 1976	Sept.-Dec. 1975			
Shipments:									
All manufacturing industries.....	-0.1	-0.3	-0.9	-0.4	-2.0	-0.6	+1.3	-1.4	-1.6
Durable goods industries, total.....	-0.9	-1.2	-0.4	-0.8	-2.8	-0.4	+1.5	-1.5	-2.2
Nondurable goods industries, total.....	-1.0	-0.7	-1.3	-0.1	-1.2	-0.7	+1.0	-1.5	-1.2
Total inventories:									
All manufacturing industries.....	-1.2	-0.6	-0.0	-0.6	-0.4	-0.0	-0.2	-0.9	-0.3
New orders:									
All manufacturing industries.....	-0.0	-1.4	-0.8	-0.7	-2.5	-0.5	+1.5	-1.8	-1.9
Durable goods industries, total.....	-1.3	-3.8	-0.1	-1.7	-3.8	-0.4	+2.1	-2.4	-2.7
Nondurable goods industries, total.....	-1.3	-1.1	-1.8	-0.2	-1.2	-0.6	-0.9	-1.5	-1.3
Unfilled orders:									
Durable goods industries, total.....	-1.4	1.2	0.1	-0.9	-0.5	-0.7	-0.2	-1.7	-1.2

Table 4.--VALUE OF MANUFACTURERS' INVENTORIES, BY STAGE OF FABRICATION, BY INDUSTRY GROUP

Millions of dollars

Industry group	Seasonally adjusted			Without seasonal adjustment			Seasonally adjusted			Without seasonal adjustment		
	June 1976 ^P	May 1976 ^R	Apr. 1976 ^R	June 1976 ^P	May 1976 ^R	June 1975	June 1976 ^P	May 1976 ^R	Apr. 1976 ^R	June 1976 ^P	May 1976 ^R	June 1975
	Total						Materials and supplies					
All manufacturing industries, total..	150,777	149,019	148,121	150,816	150,159	148,160	52,519	51,951	51,447	52,149	51,563	51,597
Durable goods industries, total.....	97,476	96,579	96,133	97,525	97,401	98,910	31,516	31,335	31,175	31,305	31,003	32,511
Stone, clay, and glass products.....	3,655	3,610	3,568	3,716	3,727	3,753	1,319	1,303	1,349	1,318	1,303	1,421
Primary metals.....	14,662	14,442	14,227	14,493	14,389	11,654	6,655	6,598	6,575	6,512	6,354	4,628
Machinery, electrical and nonelectrical	34,410	34,127	34,109	34,680	34,628	35,967	9,983	10,078	10,048	10,045	10,123	10,992
Transportation equipment.....	21,960	21,648	21,498	21,495	21,567	21,044	4,983	4,737	4,606	4,765	4,702	4,553
All other durable goods industries.....	22,789	22,752	22,731	23,141	23,090	24,002	8,576	8,619	8,597	8,665	8,521	9,202
Nondurable goods industries, total.....	53,301	52,460	51,988	53,291	52,758	49,250	21,003	20,616	20,272	20,844	20,560	19,086
Chemicals and allied products.....	11,373	11,214	11,088	11,366	11,248	10,922	4,363	4,325	4,304	4,347	4,300	4,410
Petroleum and coal products.....	4,561	4,361	4,290	4,495	4,313	4,048	1,280	1,200	1,157	1,289	1,198	1,084
Rubber and plastics products, nec.....	3,003	3,022	3,032	3,000	3,035	3,048	1,212	1,166	1,093	1,214	1,156	1,039
All other nondurable goods industries....	34,364	33,863	33,578	34,430	34,162	31,232	14,148	13,925	13,718	13,994	13,906	12,553
	Work in process						Finished goods					
All manufacturing industries, total..	49,670	49,201	49,097	49,473	49,500	49,138	48,588	47,887	47,577	49,194	49,096	47,425
Durable goods industries, total.....	41,479	41,132	41,040	41,218	41,330	41,680	24,481	24,112	23,918	25,002	25,068	24,719
Stone, clay, and glass products.....	539	537	508	551	559	512	1,797	1,770	1,711	1,847	1,865	1,820
Primary metals.....	4,679	4,597	4,411	4,625	4,640	3,709	3,328	3,247	3,241	3,356	3,395	3,317
Machinery, electrical and nonelectrical	14,688	14,503	14,550	14,664	14,614	15,145	9,739	9,546	9,511	9,971	9,891	9,830
Transportation equipment.....	14,940	14,903	14,937	14,703	14,852	14,589	2,037	2,008	1,955	2,027	2,013	1,902
All other durable goods industries.....	6,633	6,592	6,634	6,675	6,665	7,043	7,580	7,541	7,500	7,801	7,904	7,757
Nondurable goods industries, total.....	8,191	8,069	8,057	8,255	8,170	7,458	24,107	23,775	23,659	24,192	24,028	22,706
Chemicals and allied products.....	1,828	1,813	1,812	1,836	1,831	1,803	5,182	5,076	4,972	5,183	5,117	4,709
Petroleum and coal products.....	1,222	1,203	1,224	1,240	1,214	1,016	2,059	1,958	1,909	1,966	1,901	1,948
Rubber and plastics products, nec.....	489	483	496	486	479	502	1,302	1,373	1,443	1,300	1,400	1,507
All other nondurable goods industries....	4,652	4,570	4,525	4,693	4,646	4,137	15,564	15,368	15,335	15,743	15,610	14,542

^PPreliminary.^RRevised.

¹These reflect revised adjusted April figures for Machinery (electrical and nonelectrical) materials and supplies, work-in-process, and finished goods. The unadjusted figures for April are: materials and supplies, 10,145; work-in-process, 14,663; and finished goods, 9,757.

Table 5.--RATIO OF MANUFACTURERS' INVENTORIES TO SHIPMENTS AND UNFILLED ORDERS TO SHIPMENTS, BY INDUSTRY GROUP

(Based on seasonally adjusted data)

Industry group	Inventories - shipments ratio				Unfilled orders - shipments ratio ¹ months' backlog			
	June 1976 ^P	May 1976 ^P	Apr. 1976	June 1975	June 1976 ^P	May 1976 ^P	Apr. 1976	June 1975
All manufacturing industries, total.....	1.60	1.58	1.58	1.83	2.33	2.35	2.36	2.75
Durable goods industries, total.....	2.00	2.00	2.01	2.42	2.81	2.85	2.86	3.34
Stone, clay, and glass products.....	1.54	1.53	1.50	1.74	(NA)	(NA)	(NA)	(NA)
Primary metals.....	1.89	1.90	2.00	2.40	2.03	2.03	2.00	2.44
Fabricated metals.....	1.75	1.71	1.78	2.33	3.06	2.97	3.10	4.23
Machinery, except electrical.....	2.61	2.56	2.58	3.00	2.98	2.95	2.98	3.63
Electrical machinery.....	2.25	2.15	2.14	2.56	3.35	3.14	3.08	3.61
Transportation equipment.....	1.81	1.90	1.85	2.27	5.38	5.42	5.42	6.14
Instruments and related products.....	2.42	2.40	2.38	2.83	(NA)	(NA)	(NA)	(NA)
Nondurable goods industries, total.....	1.18	1.15	1.13	1.22	0.51	0.51	0.52	0.45
Food and kindred products.....	0.84	0.81	0.80	0.78	(X)	(X)	(X)	(X)
Tobacco products.....	5.61	5.71	5.17	5.32	(X)	(X)	(X)	(X)
Textile mill products.....	1.45	1.41	1.44	1.53	(NA)	(NA)	(NA)	(NA)
Paper and allied products.....	1.24	1.20	1.22	1.41	(NA)	(NA)	(NA)	(NA)
Chemicals and allied products.....	1.45	1.43	1.36	1.57	(X)	(X)	(X)	(X)
Petroleum and coal products.....	0.74	0.72	0.71	0.78	(X)	(X)	(X)	(X)
Rubber and plastics products, except.....	1.39	1.36	1.37	1.55	(X)	(X)	(X)	(X)

NA Not available. P Preliminary. F Revised. X Not applicable.

¹Excludes the following industries with no unfilled order: wooden containers; glass containers; metal cans, barrels and drums; motor vehicle assembly operations; foods and related products; tobacco; apparel and related products; chemicals; petroleum and coal products; and rubber and plastics products, except.

Appendix

The following is a description of the survey and definitions used. These are provided to clarify the meaning of the items involved and do not represent any revisions from those definitions previously employed.

DESCRIPTION OF SURVEY

The Manufacturers' Shipments, Inventories, and Orders survey provides monthly figures that are comparable to the annual totals published each year in the Annual Survey of Manufactures (ASM). The ASM is based on a sample of approximately 60,000 manufacturing establishments drawn from the 5-year census universe of about 310,000 establishments. In the ASM, each manufacturing establishment provides data on employment, payrolls, shipments, cost of materials, capital expenditures, and inventories as well as other selected items. The establishments do not provide information on unfilled orders or new orders. Since the ASM is establishment based, it provides data for each of the 425 manufacturing industries in the Standard Industrial Classification System (SIC) and area data for industry groups.

The monthly survey M3-1 does not provide information at the complete SIC industry detail because of the smaller size of the reporting panel and the fact that most companies cannot provide shipments, inventories, and orders data monthly for individual establishments.

The monthly reporting panel consists of approximately 5,000 reporting units and includes virtually all companies with 1,000 or more employees and a sample of the smaller ones. The reporting unit typically comprises the entire operations of a company although many of the larger diversified companies file separate divisional type reports for their operations in different industries.

Most of the reporting units include mixed industry activity even within the broad industry categories of the monthly survey. The survey methodology assumes that the month-to-month changes of the reporting units classified in each industry category represent effectively the month-to-month movements of the establishments in the SIC industries which make up the category. Thus, the monthly reports are used to update the ASM estimates by using a link relative of matched companies in each industry.

EXPLANATION OF TERMS

Value of Shipments—Shipments in the monthly survey are equivalent to value of shipments as reported

in the ASM which are received or receivable net selling values, f.o.b. plant, after discounts and allowances and excluding freight charges and excise taxes. Included in shipments are the value of all products sold, transferred to other plants of the same company, or shipped on consignment.

Shipments also include receipts of establishments in the industry for contract work performed for others, resales, receipts for miscellaneous activities such as the sale of scrap and refuse; value of installation and repair work performed by employees of the plant; and value of research and development performed at the plant. In the aircraft industry and shipbuilding, the value of work done in a given year varies considerably from the value of shipments because of the long lead time between the input of the materials and labor and the shipments of the completed aircraft or ship. In the annual survey, therefore, the value of work done during the year is requested rather than the value of shipments.

The value of shipments figures developed from the ASM contain duplication at the all manufacturing and industry group levels since the products of some industries are used as materials by other industries within the industry group. With the exception of motor vehicles, it is not significant at the 4-digit SIC group level. Since the M3-1 industry categories typically are groupings of industries, this duplication is significant for the all manufacturing, durable goods and nondurable goods categories and the various market groups. The significance of the duplication within the specific M3-1 industry groups varies depending on the 4-digit industry composition of these groups. It is most pronounced in a few highly integrated industry areas such as primary metals and motor vehicles and parts.

Since most monthly reports are for the entire company or major divisions rather than establishments, the companies are requested to report net sales, i.e., total company billings after discounts and allowances. Companies which file divisional reports are requested to treat transfers from one division of the company to another as if they were net sales to outside customers. Although this definition of shipments in the monthly reports differs from that used in the annual establishment reports, it is assumed that the month-to-month changes in company sales in the industry are representative of the month-to-month shipments of the establishments in the industry.

Inventories—End-of-month inventories in the monthly survey are identical in definition to the end-of-year inventories in the ASM. In the ASM, respondents are asked to report inventories of individual establishments at approximate current cost if

feasible; otherwise, "at book values." Since different methods of inventory valuation are used (LIFO, FIFO, etc.), the definition of the aggregate inventories for establishments in an industry is not precise. The figures on the change in inventories from one period to the next are of greater significance than the actual aggregates.

Inventories are reported by stage of fabrication: (a) finished goods; (b) work in process; and (c) materials, supplies, fuel, and other inventories. In using inventories by stage of fabrication at the all manufacturing and 2-digit industry levels as well as for the durable and nondurable goods sectors, it should be noted that a finished product of one industry may be a raw material for another industry at the next stage of fabrication. Insofar as the durable and nondurable goods sectors and also the 2-digit industry groups contain industries with successive stages of processing, the same type of commodity may be included under different inventory categories in the aggregate statistics.

New Orders Received and Unfilled Orders—Orders as reported in the monthly survey are net of cancellations during the month. They include orders received during the period and also filled during the period as well as those orders received for future delivery. They

also include the net sales value of contract change documents which increase or decrease the sales value of the unfilled orders to which they relate. Orders include only those supported by binding legal documents such as signed contracts, or letter contracts. In case of letter contracts the full amount of the sales value is included if the parties are in substantial agreement on the amount; otherwise, only the funds specifically authorized to be expended are included. The respondent is instructed to deduct the sales value of partial or complete cancellation of existing orders.

Unfilled orders include orders as defined above that have not yet passed through the sales account. Generally, unfilled orders at the end of the reporting period are equal to unfilled orders at the beginning of the period plus net new orders received less net sales.

While both new orders and unfilled orders are used in reviewing individual company reports for consistency, only unfilled orders are estimated directly in the tabulated totals. New orders are derived from the shipments plus net change in unfilled orders for each industry category. This procedure is followed for seasonally adjusted data as well as for the unadjusted data. Shipments and unfilled orders are seasonally adjusted independently. Seasonally adjusted new orders are derived from seasonally adjusted shipments and seasonally adjusted unfilled orders.

